



3-2-04

1635

PATENT

Attorney Docket No.: 030627

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Ramon Eritja et al. )  
)  
Serial No.: 10/055,732 )  
)  
Filing Date: January 22, 2002 )  
)  
Entitled: Compositions and Methods )  
of Synthesis and Use of Novel )  
Nucleic Acid Structures )

INFORMATION DISCLOSURE STATEMENT

Pittsburgh, Pennsylvania 15219  
March 1, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the provisions of 37 C.F.R. Sections 1.56, 1.97 and 1.98, Applicants submit the documents listed on the attached PTO/SB/08b, which they believe may be pertinent to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. 1.56. This Information Disclosure Statement is not an admission that any patent, publication or other information referred to herein is "prior art" for this invention unless specifically designated as such. Applicant hereby requests that the Examiner review and make an independent evaluation of the art.

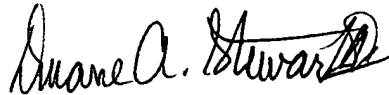
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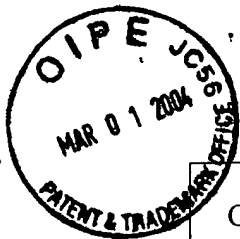
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ATTORNEY'S DOCKET NO.

030627

IN RE APPLICATION OF:

Ramon Eritja, et al.

Application Serial No.:

10/055,732

Filing Date:

January 22, 2002

Title:

Compositions and Methods of Synthesis and Use of Novel  
Nucleic Acid Structures

Group Art Unit

1635

Examiner

Janet L. Epps

Express Mail mailing label number: EV 369814878 US

Date of Deposit: March 1, 2004

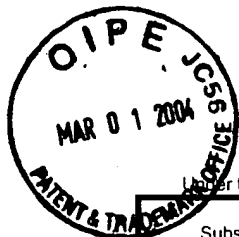
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STATEMENT BY APPLICANT**

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Sheet	1	of	2	Application Number	10/055732
				Filing Date	January 22, 2002
				First Named Inventor	Ramon Eritja
				Art Unit	1635
				Examiner Name	Janet L. Epps
				Attorney Docket Number	030627

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	A1	RAO, T. S. et al., Synthesis of Oligonucleotides Containing 7-(2-Deoxy- $\beta$ -D-erythro-peniofuranosyl) guanine and 8-Amino-2'-deoxyguanosine, J. Heterocyclic Chem., 1994; 31:935-940.	
	A2	TESTER, J. et al., Synthesis and Characterization of DNA Oligomers and Duplexes Containing Covalently Attached Molecular Labels, J. Am. Chem. Soc., 1989; 111: 6966-6976.	
	A3	HOLMES, R.E. and ROBINS, R.K. Purine Nucleosides, IX. The Synthesis of 9- $\beta$ -D-Ribofuranosyl Uric Acid and Other Related 8-Substituted Purine Ribonucleosides, J. Am. Chem. Soc. 1965; 87: 1772-1776.	
	A4	LONG, R.A. et al., The Synthesis of 8-Amino- and 8-Substituted Aminopurine Nucleosides, J. Org. Chem. 1967; 32: 2751-2756.	
	A5	HORNE, D.A. and Dervan, P.B., Recognition of Mixed-Sequence Duplex DNA by Alternate-Strand Triple-Helix Formation J. Am. Chem. Soc. 1990; 112: 2435-2437.	
	A6	FROEHLER, B.C. et al., Triple-Helix Formation and Cooperative Binding by Oligodeoxynucleotides with a 3'-3' Internucleotide Junction, Biochem. 1992; 31: 1603-1609.	
	A7	KANDIMALLA, E.R. and AGRAWAL, S., Hoogsteen DNA Duplexes of 3'-3' - and 5'-5' - Linked Oligonucleotides and Triplex Formation with RNA and DNA Pyrimidine Single Strands, Biochem., 1996; 35: 15332-15339.	
	A8	SHIELDS, G.C. et al., Molecular Dynamics Simulations of the d(T•A•T) Triple Helix, J. Am. Chem. Soc. 1997; 119: 7463-7469.	
	A9	HATTORI, M. et al., Poly(8-aminoguanilyc acid): Formation of Ordered Self-Structures and Interaction with Poly(cytidylic acid), Biochem. 1975; 14: 5033-5045	

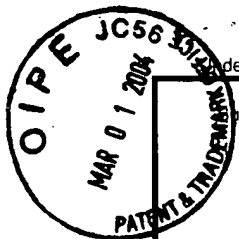
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				Art Unit	1635
				Examiner Name	Janet L. Epps
				Attorney Docket Number	030627

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	A10	MASSOIT, g. et al., Phosphite Coupling Procedure for Generating Internucleotide Links, J. Am. Chem. Soc. 1975; 97: 3278-3279..	
	A11	DURAND, M. et al., Triple-Helix Formation by an Oligonucleotide Containing One (dA) <sub>12</sub> and Two (dT) <sub>12</sub> Sequences Bridged by Two Hexaethylene Glycol Chains, Biochem. 1992; 31: 9197-9204.	
	A12	KAWAI, K. and SAITO, I., Stabilization of Hoogsteen Base Pairing by Introduction of NH <sub>2</sub> Group at the C8 Position of Adenine, Tetra. Let., 1998; 39: 5221-5224.	
	A13	GARCIA, R.G., et al, Theoretical calculations, synthesis and base pairing properties of oligoneucleotides containing 8-amino-2'-deoxyadenosine, Nac. Acids Res. 1999; 27: 1991-1998.	
	A14	GARCIA, R.G. et al., Triple Helix Stabilization Properties of Oligonucleotides Containing 8-Amino-2'-Deoxyguanosine, Bioorg. & Med. Chem. Lets., 1998; 8: 3011-3016.	
	A15	SOLVIA, R. et al., DNA-tiplex stabilizing properties of 8-aminoguanine, Nuc. Acids Res., 2000; 28: 4531-4539.	
	A16	LOAKES, D. et al, 3-Nitropyrrole and 5-nitroindole as universal bases in primers for DNA sequencing, Nuc. Acids Res., 1995; 23: 2361-2366.	
	A17	RIPPE, K. and JOVIN, T.M., Parallel-Stranded Duplex DNA, Meth. in Enzymology, 1993; 211: 199-220.	

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